

# The Ballarat Naturalist

July 2007



Trailing Goodenia  
*Goodenia lanata*  
(Club Logo)

---

## CLUB CAMP TO APOLLO BAY FRIDAY 25 TO SUNDAY 27 MAY 2007

Twenty members made up the group staying at the Sacred Heart Convent at Apollo Bay for the club's annual "camp" with members arriving at various times during the afternoon and evening on Friday.

Friday evening was particularly mild so a group set off after dark to Maits Rest to investigate the glow worm situation. The moon was particularly bright which made discerning the glow worms a challenge in the dappled cast shadows. However, once torches were off and eyes adjusted the faint telltale blue glow of these creatures could be detected and the outing was rewarding.

The organisation for the weekend was informal with participants encouraged to follow individual interests. As a consequence two groups headed off on a very pleasant Saturday.

Most people travelled up Binns Road stopping along the way to view an excellent tall specimen of a skirted tree fern (*Cyathea xmarcescens*) which Bill Murphy had alerted us to look for. The next stop was at a bridge on the Aire River where a plantation of mature Californian redwoods was observed. It was then on past the Otway Fly to Triplet Falls. This was the location where a few years ago vandals had used a chainsaw to damage about 30 mature trees and as a consequence the track had been closed and now reopened. There was old saw milling equipment, excellent views of the falls and a good variety of ferns, but the pink robin that John Gregurke had seen the previous day did not bestow its presence on us. Fungi were many and varied.

After lunch a side route was taken to see the Aire River crossing near the camp ground of the same name. This was not a main route but provided a picturesque route through the forest and was safe enough provided cars kept to the centre gravelled section. One of the group confirmed the centre advice by adding excitement for the occupants with some skidding. Despite the apparent isolation of the route we were greeted by a big group of four wheel drive enthusiasts who had obviously been redistributing the surface of the roads as indicated by the mud all over their vehicles. However, they had only stopped for lunch and soon

departed. The return route was via Lavers Hill and the Great Ocean Road. A stop was made at Marengo to view the seals on a rocky platform and to admire enormous crashing waves.

A second group had been exploring closer to the coast including the Marengo rock pools, along the Otway lighthouse road and a walk along the Parker River Road which was considered to be very worthwhile. Their explorations had revealed a group of five hooded plovers at Point Bunbury and they also saw four sooty and one pied oystercatcher amongst other birds.

Our Saturday evening meals were enlivened with some very enjoyable bubbly provided by Alison and John to thank us for all our friendship over their two Australian years. Later all present were roped into a committee meeting with the key item being a response to Ballarat City's alternatives for Victoria Park. It was valuable to have wider group input into a response. A small group then prepared our submission.

Sunday was not such a pleasant day as there was a very strong wind. The first stop was at Point Bunbury to see the hooded plovers which had stayed there for us. It was then off to Mariners lookout where the short walk from the carpark has an excellent collection of weeds including holly with prolific berries, blackberries and Spanish heath. However, it finishes with panoramic views over the town. After morning tea a stop was made at Skenes Creek where Peter and Claire had promised a nice walk which turned out not to exist. We will find it one day. However, the stop was fortuitous as there was a dead male antechinus. This was photographed and taken by John Gregurke for later identification and display at the next general meeting. John advised at the meeting that it was a Swamp antechinus, the distinguishing features being leaden grey on back and shoulders grading in to rich yellowish-brown on rump and flanks; greyish-yellow or buff below; tail short-haired, grizzled dark brown above, lighter below. Fur coarse, grizzled. Foreclaws long, the tail and ears short, eyes and ears small. Tail much shorter than body.



The camp finished with a visit to Kennett River where koalas can be seen and photographed at eye height. The mix of planted native plants, birds and koalas here is pleasing.

We were able to use the facilities into the afternoon as three people stayed Sunday evening. This made Sunday departure leisurely.

We decided to walk to

Mariners Falls later in the afternoon. After our walk we joined John Mildren to enjoy the antics of many birds eating apples from a farmer's small orchard. Both male and female satin bower birds as well as numerous king parrots, crimson rosellas and less interesting birds were enjoying easy pickings. We were then fortunate to have a close, clear and long view of a Bassian thrush, an attractive bird which John says is often there. Yellow robins and flitting blue wrens were numerous.

Sadly, this was Alison and John Williams last outing with the club before they depart back to England and it was enjoyable to share this part of our country with them. Apollo Bay and the Sacred Heart Convent again proved to be an excellent location for a winter camp with facilities proving convenient and there being a wide variety of locations to enjoy. Some people attended this "camp" for the first time, joining some who are repeat visitors. Everybody participated enthusiastically and hopefully all enjoyed themselves.

Claire and Peter Dalman

---

## **A VISION FOR THE FUTURE – KOALA MANAGEMENT IN BALLARAT**

### **ROLF SCHLAGLOTH**

Ballarat is fortunate that Rolf Schlagloth, as the Victoria Liaison Officer with the Australian Koala Foundation, is located here. The Australian Koala Foundation is a non-government organisation that relies entirely on donations to support its work and receives no government funding. As a consequence of its independence and political neutrality it is able to work freely improving the situation for wild koalas. Over the last 20 years the Foundation has invested \$20 million on koala research.

Rolf came to Australia 21 years ago from Germany having studied and qualified in mathematics and economics. In Australia he completed a degree in Biological Resource Management and has always focussed on koalas in his studies and his work.

The koala is ideal as a focus for efforts to improve the environment. It is one of few icon species, being widely known and identified with Australia and has high tourist potential. The panda in China is another example of an icon species. Koalas are easily recognisable and the males are identifiable from the scent gland on their chest and the consequent stain on their fur. A recording of their call was a reminder of how disconcerting this can be when heard for the first time.

In the early 1900s koalas were hunted to near extinction, being easy targets. A



slide of a group of hunters and dead koalas emphasised the impact of this activity. In Queensland about 1 million koalas were killed in one year. Americans played a significant role in the protection of koalas with the banning of koala product imports and consequent removal of a big market.

Rolf indicated that historically Victoria has the worst record of all states in koala and koala habitat management. By the time hunting was banned the only breeding population that remained was on French Island. With no predators, the numbers quickly increased to an unsustainable level. The solution at the time was relocation and a video clip from 1929

showed the methods then used. At various times koalas have been relocated to other places including Trentham, Ballarat, Snake Island and Raymond Island in Gippsland, Mt Eccles, Framlingham Forest and Tower Hill. However, there was little monitoring or follow-up. More recent studies have shown there are high death rates for relocated koalas, particularly males which require their own range when two years old. With these places being islands or islands of forest surrounded by farmland a zoo like situation was created adding to the effect of the very small gene pool as a consequence of all populations in Victoria, except for a number in far east Gippsland having come from the few originally on French Island. Even though relocation losses were high, almost invariably the numbers increased to unsustainable levels.

Current management translocation practices are more humane with sterilized animals being released back into their environment and recaptured one year later for relocation in an attempt to reduce the impact of handling and consequent deaths. Chlamydia is a disease like herpes in that it seems to have a bigger impact when animals are stressed.

The current threats to wild koalas include dog attacks, cars, disease and bushfires and habitat destruction. Following the recent fire which destroyed about 90% of the habitat in the Framlingham forest 45 koalas were caught in 3 days and probably 300 had been taken out, but possibly 1000 died. However, the most significant threat is still habitat destruction. The Koala Foundation considers that the retention of existing forests and the establishment of vegetation corridors between these areas is the best way of maintaining koala populations.

There is now a State Government Koala Management Plan for Victoria and the city of Ballarat is the first council in Victoria to adopt a koala management plan. As part of the plan about 2,500 vegetation areas around Ballarat have been assessed for their suitability as koala habitat and the work done to identify koala locations, mostly by looking for their scats. The Ballarat Council is to be congratulated for their foresight in adopting this plan which hopefully will have wider benefits with wildlife and the environment. The work in establishing council koala management plans has now moved to the Golden Plains Shire using the Ballarat plan as a model.

The koala, environment generally and the people of Ballarat are indeed lucky to have Rolf working locally and with the Australian Koala Foundation. His talk showed there is still a lot to be done in ensuring the future of koalas and in maintaining and improving the habitat for all native animals.

Peter Dalman

---

**CARL LINNAEUS - 300 YEARS.**  
**CHRIS BAULCH**

Carl Linnaeus (1707-1778) is one of Sweden's most famous citizens. He is world renowned as the scientist who developed a way to classify, describe and name flora and fauna. The binomial nomenclature we use today is all because of Linnaeus. In Sweden he is just as well known for his travels and discoveries in his own land. He wrote of his expeditions and they are still read by most Swedes especially his first trip which was to Lappland. He wrote an autobiography and is regarded as a national treasure. He became a professor at the University of Uppsala and taught medicine and botany. Many of his pupils travelled all over the world during the second half of the 18th century and of most interest to us, Daniel Solander, who was assistant botanist on Captain Cook's voyage to Australia in 1770.

Linnaeus was born 300 years ago on the 23rd May 1707 and in Sweden during 2007 many celebrations and events are occurring to celebrate the tercentenary of his birth. For instance, on Sunday 26th May at the University of Uppsala saw the conferring of honorary doctorates in memory of Linnaeus on Sir David Attenborough, Dame Jane Goodall and Kofi Annan. All in the presence of the Swedish royal family and the Japanese Emperor Akihito and Empress Michiko.

His birthplace was the small village of Rashult, Smaland in the central south of Sweden. He was the eldest son and had three sisters and a brother. His mother was named Kristina and his father Nils Ingmarsson Linnaeus who was a Lutheran priest and was curate in the Parish of Stenbrohult. Two years after Carl's birth the family moved to Stenbrohult when his father became the priest there and where they stayed for the rest of their lives. Carl's brother Samuel succeeded his father there as priest. When Carl's father Nils went to University he adopted the name Linnaeus, a latinized name based on *lin* (the linden tree). Carl was therefore baptized Carl Linnaeus. In 1757 he was made a noble and became Carl von Linné.

His father was a keen naturalist and often took young Carl on walks describing and naming the flowers and animals they saw. In his autobiography Linnaeus tells us that he was born in "the spring when the cuckoo was calling between the month of growing and the month of flowering". His parents wanted him to become a priest or a doctor, preferably a priest because of its higher status, so when

he was old enough he was sent to school in Växjö to study theology. However his interest in botany led his teacher to suggest to his parents that he study medicine instead. Botany was very much a study within medicine as there was keen interest in the medicinal qualities of plants. So at 20 years of age Linnaeus attended the University of Lund to study medicine, but only for a year.

In 1728 he transferred to the University of Uppsala to continue his medical studies. In 1655 Olaf Rudbeck the elder had established a university botanic garden and here Linnaeus was in his element. He observed the plants, dissected them, described them, named them and wrote an essay about them and the animals he saw. Olaf Celsius was so impressed by Linnaeus' work that he encouraged him, housed him and financed his studies. Linnaeus cultivated his own flowers in the garden and lectured about them to any who cared to listen. Sometimes up to 400 people came to hear him talk.

He continued examining the parts of flowers and keeping notes and illustrations in his notebook. His best friend was Peter Artedi and they discussed their findings often and began to describe and name plants, animals, birds, insects, fish and even stones. They decided that Artedi would study fish and insects and Linnaeus the rest.

In early May of 1732 (Spring in Sweden) Linnaeus began his now famous (at least in Sweden) journey to Lappland. He went alone and by horseback into the province of Dalarna then back to the east coast and travelled north. A side trip from Umeå to the marshy country of Lycksmýren almost finished him off in the rain, the cold and the wind and (would you believe it) masses of mosquitoes! Back to the east coast and inland again to Jokkmokk on the Arctic circle and to the west coast of Norway. Further north and Linnaeus lived among the Lapps dressing as they did and describing them as well as the flora and fauna. He returned to Sweden via Finland after crossing the Baltic Sea in a mail boat. He had travelled 4000kms in six months.

Among many things he discovered and named was what he called his "favourite species", *Linnaea borealis* and wrote about his journey in *Iter Lapponicum* 1732. He continued exploring and went to Dalarna (1734) and later to the islands of Öland and Gotland in the Baltic Sea (1741), Västergötland (1746) and Skåne (1749).

It was between the years of 1735 and 1738 that Linnaeus' great contribution to the world of science became widely known. He travelled to Germany, France and England but it was in the Netherlands that he completed his medical studies and published his work. In *Systema naturae* he set out his system of classification of plants, animals and stones and in later editions even included the stars and micro-organisms. This may seem strange to us now, although geologists would surely love a system to classify rocks, but as Linnaeus said of himself "God creates, but Linnaeus organizes". He published other works as well but it should be noted that he also had published his friend Peter Artedi's *Fiskarnas Naturalhistoria* (The Natural History of Fish). Artedi had fallen into one of Amsterdam's canals on a dark night and drowned.



The Linnaeus system began with Kingdom then Class, Order, Genus and finally Species. At the level of class Linnaeus examined the sexual characteristics of plants and roused the ire of the more puritanical members of Europe and indeed the Vatican banned his *Systema naturae*. Linnaeus noted that flowers varied with the numerical ratio of the male part of the flower (stamen) to the female part (pistel). Some flowers had one stamen to one pistel whilst others had one stamen to two or three pistels and so on. He identified 24 classes from Class I -Monandria (one man), through Dodecandria (12 men), Polyandria (many men) to Cryptogamia (hidden seeds).

After returning to Sweden in 1739 and taking up a medical practice in Stockholm he married Sara Lisa Moraeus and then in 1741 became Professor of Medicine



Linnaeus with Students

and Botany at the University of Uppsala. There he remained for the rest of his life, living most of it in the University Botanical Garden (now called Linne's Garden), teaching, leading excursions into the city forest, writing letters, cultivating plants and setting them out in the garden according to their classes, collecting animals (monkeys and a raccoon and birds (parrots), and receiving news and plant samples from his students who were by now travelling all over the world. He and Sara Lisa had 5 daughters and 2 sons. In 1758 he bought a country house at Hammarby not far from Uppsala where he would retreat to his garden to relax. He died in 1778 and now lies in the Uppsala cathedral revered by all who know of him.

His Australian connection is through Daniel Solander who as stated came to Australia in 1770 with Captain Cook. He and Linnaeus had an extensive correspondence (in all Linnaeus wrote about 6000 letters to many people during his life).

The taxonomic work of Carl Linnaeus remains with us today but he was famous in his own lifetime. There are 505 known portraits of him in the world today and many statues, especially in Sweden. He became known and may still be called "The King of Flowers". And so when you look up your flower book and find *Taraxacum officinale* L. remember that it was Carl Linnaeus who first named it and described it.

## Excursion to Basalt and Deep Spring

Leaders: Greg Binns & Carol Hall

Six members drove to the "Basalt block", the westernmost segment of the Wombat Forest, located north of the Daylesford road. This shortcut to *Lavandula* Lavender Farm and *Cricket Willow* follows gold-bearing Ordovician sandstone, much of it currently used by radiata pine plantations with patches of native forest, probably secondary growth. The area is severely disturbed by 19<sup>th</sup> century gold mining, with shafts, aqueducts, old concrete foundations and stonework. A small outlier of basalt which is farmed occurs in the middle.

Exploring Henderson Spring which occurs at the lower end of Boot Gully we found considerable evidence of disrupted drainage along the valley sides with well-constructed stone walls. The spring itself debouches into a manmade trough but was barely flowing despite recent rains – the aquifer must be very low. A plaque installed in 2003 by his descendants commemorates James Gordon Henderson and other pioneer settlers who farmed the area from the 1850s. James himself, born in 1899, died on the Burma Railway in 1943 during WWII.

The bed of the creek crosses steeply dipping, quite massive, beds of Ordovician sandstone, with here and there a softer layer eroded like a deep trough along the bedding plane; in another place an eddy of the creek had eroded a semi-circular "mill". The obstructions formed by the jutting edges of rock would catch gold particles after a downpour and be well worth investigating if you were armed with a spoon or fine trowel to gouge out the sediment. Along the steep sides of the gully were Blackwoods, Messmate Stringybarks, Narrow-leaf Peppermints and a mix of Candlebarks and Manna Gums. Genny Binns looked up to see a pair of Wedgetail Eagles circling and as we looked skywards through the trees a koala was spotted high in a Manna Gum: further study through binoculars confirmed that it was an adult with a youngster.

Along the pathways was evidence of echidna diggings and the droppings of 'roos or wallabies. A Yellow-tufted Honeyeater was seen, a Yellow-rumped Thornbill, and galahs flew over as did the ubiquitous Sulphur-crested Cockatoos. An occasional Brown Treecreeper was heard. But the whole day was notable for the relative silence, and absence of obvious birdlife.

Retracing our route a short distance we took the Charlesford Track down to Charlesford Diggings where there are two dams, one signed as a water source for the CFA. Muddy tracks suggested that water was being taken from the larger dam. We walked around the dam, finding many fresh fungi after the week's rainfall, including the tiny yellow *Omphalina* species, and a deep brown species growing on decaying wood. Yellow Jelly Bells were found on a twig; there were other varieties to be seen but lacking Les Hanrahan (away on a Fungimap conference in Qld) we found it difficult to identify them all. A huge "Blackfellows' Bread" bracket fungus clung to one of the bigger stringybarks. The best bird sighting for the day – a Scarlet Robin – occurred here.



Sadly part of the area with considerable remains of mining equipment is being used as a rubbish dump; we turned over the large number of sheets of corrugated iron but found little other than an ants' nest – no reptiles or tiny marsupials.

Along the dam wall several mud "chimneys" three or four centimetres high had us puzzled as to whether they were made by spiders or ants, then even more challenging were some large hollow ochre-coloured clay tubes 6-7 cms long protruding from tree roots. The recent rains had enabled fresh patches of *Drosera* (Scented Sundew) to emerge, beautifully complete with their gluey drops to which were attached tiny captured invertebrates. In the areas of native forest *Dianella* sp. showed itself to be very hardy, clearly having survived the dry years. Emerald green seedlings of other natives were emerging, but, Genny and Greg Binns having departed for another commitment, the remaining group did not have the resources to identify many of them.

We moved on to one of the original cemeteries of the Eganstown area, an area once called Blanket Flat in its gold mining heyday. Tombstones dated back to the early 1860s and there were new ones placed there in the last 10 years but there were several unmarked mounds which could have been of any age. Fungi were again conspicuous, as was Spanish Heath, something we can do without. Around the perimeter was a patch of one of the holly grevilleas but we'll have to wait till it flowers to identify it. Interestingly, a "Significant Roadside Conservation Area" sign is placed on the bank of the creek along Cemetery Road not far from its junction with the Daylesford Road – another reason to visit in spring.

Finally we called in at Deep Spring, a source of mineral water first discovered in 1847 and commercially exploited since 1918. A list of its minerals displayed adjacent to the constantly flowing spout revealed that 50% of the content is lime and magnesium, and a tasting of the waters revealed its slightly fizzy nature – a not unpleasant flavour. The colour of the bed of the creek suggested some iron content, too.

Thanks to Greg for preparing this excursion and being his usual fount of knowledge – he had done some phoning around in search of historical information which he passed onto us in the morning, providing a context for the area we were looking at.

Carol Hall.

## FIELD NATURALISTS CLUB OF BALLARAT MINUTES OF GENERAL MEETING 1 JUNE 2007

The President welcomed 28 members and visitors.

**Apologies** were received from Bill Murphy, John Mildren, Les Hanrahan, Val Hocking, Dulcie Brooke, Margaret Martin. M: Peter Billing S: Ken Hammond. Accepted

**Minutes of previous meeting** as printed in Ballarat Naturalist . Accepted

### **Business Arising:**

*Herbarium:* Peter Dalman has contacted the National Herbarium and will deliver sample of herbarium collection to enable the herbarium to make a decision to accept the collection of herbarium specimens collected by the late Pat Murphy.

*A Living Lake slides:* Roger Trudgeon has advised that the Ballarat Historical Society/ Gold Museum will accept the set of slides of Lake Wendouree. The Society is conducting its Capture the Vision project at present and these images will make a significant contribution to the record of the changing environment of Ballarat and its lake. The Historical Society collections are housed at the Gold Museum. Carol Hall will arrange to deliver the slides.

*Wattles of Ballarat Region:* Bill Murphy would be very pleased for the Club to complete and publish a book on the Wattles of Ballarat Region. Pat Murphy began this.

*Rotary Club of Wendouree Men and Boys Expo:* The committee decided to organize a display for this Expo on Sunday 14 October. Carol Hall volunteered to staff the display and another volunteer is required to assist. An inside site with power, table and chair will be booked. John

### **Correspondence IN:**

- Field Naturalists Club of Victoria: Victorian Naturalist, April 2007; Field Nats News, June 2007.
- Castlemaine Field Naturalist Club: Castlemaine Naturalist, May 2007.
- Otway Ranges Environment Network: Membership Renewal \$25.
- Threatened Species Network: The Web, Autumn 2007.
- Royal Horticultural Society of Victoria: Newsletter, June 2007; Membership Renewal \$20.
- DSE: Fire Operations Plan and Wood Utilisation Plans.
- VNPA: Appeal; Land and Biodiversity White Paper.
- Glenelg Hopkins CMA: Regional Weed Plan community consultation.
- Bush Heritage Fund: Bush Heritage News, Autumn 2007.
- Bendigo Bank: Statement.
- Corangamite CMA: Landcare Awards.

### **OUT:**

- City of Ballarat: Victoria Park Precinct Outline Development Plan submission.
- Guest Speakers (Cincotta, Tiddy, Morgan): Confirmation of arrangements.

Inward Correspondence accepted and Outward Correspondence approved:  
M: Elspeth Swan S: Dulcie Brooke

Business Arising from Correspondence dealt with by committee.

## Reports

### **Treasurer's Report: Income \$177.30, Expenditure \$65.75, Balance \$4549.92**

Moved: Peter Dalman                      Seconded: Greg Binns   Received

**Apollo Bay Club Camp:** Twenty people attended the club camp held at Star of the Sea Convent. During the weekend people visited Maits Rest, Ayre River, Triplet Falls, Parker River, Crayfish Bay and Kennett River.

**New Wetland:** Gavin Cerini reported that a new wetland had been constructed on the north-east side of Winter Swamp. It is designed to divert water from Flaxmill Swamp into Winter Swamp. After one week it had attracted 13 White-faced Heron. Gavin suggested "Brolga Swamp" as a name because Brolga are seen in the area.

## **General Business**

**SEANA Spring Camp; ANN 2008:** Members were reminded to register for these camps.

### **Show and Tell:**

- Carol Hall displayed Photographs of fungus and autumn colours taken at Apollo Bay last weekend.
- John Gregurke showed the Swamp Antechinus found at Skenes Creek last weekend. Distinguishing features are leaden grey on back and shoulders grading in to rich yellowish-brown on rump and flanks; greyish-yellow or buff below; tail short-haired, grizzled dark brown above, lighter below. Fur coarse, grizzled. Foreclaws long, the tail and ears short, eyes and ears small. Tail much shorter than body.

### **Field Reports**

- Nina Netherway: At Invermay Park, a 20cm long juvenile Brown Snake was captured and relocated to bushland.
- Greg Binns: At Haddon Common, drosera is growing densely. Fungi and lichen also seen.
- Helen Burgess: Large clump of white fungus growing at Ballarat North.
- Ken Hammond: Red-capped Robin at Bealiba, White-backed Swallow at Maryborough Sewerage Treatment Plant.
- Ken McDonnell: At Creswick, New Holland Honeyeater and Eastern Spinebill feeding in blue flowered sage although birds are said to be attracted to red-flowered plants.
- Claire Dalman: Golden Whistler visited Wendouree garden.
- Tony Johns: Grey Butcherbird in Drummond Street South back yard.
- Gavin Cerini: 13 White-faced Heron at new wetland near Winter Swamp. Many mushroom rings at Waubra after recent rain.

**Excursion arrangements:** Basalt and Deep Spring, on Sunday 3 June, Leader Greg Binns.

**Syllabus Item:** Chris Baulch, club member, "Carl Linnaeus – 300 years". Chris spoke of Linnaeus' life and works in Sweden and showed slides taken when he visited Sweden. Peter Dalman thanked Chris for his interesting talk.

**Supper.**

CALENDAR

July

- Fri 6 John Tiddy—Naturalist & Photographer *Spring in the Grampians*
- Sun 8 Fungi Foray—Les Hanrahan
- Tues 24 Committee meeting 7.30pm at Gregurke’s, 1 John St., Wendouree
- Thurs 26 Mid-Month Excursion 9.30am ‘Wetlands of the West’.

August

- Fri 3 Dr Samantha Grover—Soil Scientist *Peat Soils of the Victoria Alps*
- Sun 5 *Majorca area & Tullaroop*—Peter and Claire Dalman

Good News!

Observed on Lake Wendouree on June 11, seventy Black Swans scattered over the lake. This is about one third of the pre-drought population. Most of the swans close to the shore were banded. One pair on the east shore have returned to the same patch on the lake as they previously occupied. The return of the swans behaviour demonstrates some of the little understood behaviour of birds.



Committee

- |                          |                                  |
|--------------------------|----------------------------------|
| President.....           | Mr Peter Dalman                  |
| Vice-President.....      | Mr Greg Binns                    |
| Secretary.....           | Mr John Gregurke                 |
| Treasurer .....          | Mr Les Hanrahan                  |
| Miss Helen Burgess ..... | Mrs Claire Dalman.....           |
| Mrs Carol Hall .....     | Mrs Val Hocking .....            |
| Mr John Morrish .....    | Ms Nina Netherway (editor) ..... |

Correspondence: PO Box 328W, Ballarat West, 3350

Email:

Website: [www.ballarat.yourguide.com.au](http://www.ballarat.yourguide.com.au) Click on *Local Info. Search Environment*

Meetings are held at Ballarat Horticultural Centre, cnr. Gregory & Gillies Sts (VicRoads 254 F8) on the first Friday of the month at 7.30pm.

Excursions: Depart from Ballarat Market Place (formerly Creswick Plaza) Creswick Rd., Ballarat (VicRoads 255 M10) at 9.30am unless otherwise specified.

A monthly publication of the Field Naturalists’ Club of Ballarat Inc.  
Incorporation # A0014919P ABN 13 150 403 135